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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,297	03/07/2002	Katsuya Kume	Q68478	2667

7590 11/23/2004

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2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER

DICUS, TAMRA

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,297

Applicant(s)

KUME ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date Feb 20, 2004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

The Examiner acknowledges the declaration to overcome the prior double patenting rejection and cancellation of claims 15-16.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear as to how the ink receiving layer (11) is located on the surface of the printing sheet (1) when the printing sheet comprises the ink receiving layer. (See page 5, lines 3-9 and Figures 1 and 2 of the disclosure). Thus, the Examiner takes the position that the printing sheet is just as Figures 1 and 2 illustrate.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-9, 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0988992 A1 to Kume et al.

Kume teaches a printing sheet comprising in the following order: ink information (2)/printing sheet (1) comprised of shape retention layer (11) (ink receiving layer) and

reinforcing substrate (12) / pressure-sensitive adhesive layer (3) (PSA) and adherend (4). See [0012-0013] and Figures 1 and 2. The same silicon-containing binder is taught at [0012], [0020], [0021] and [0032]. Layer 11 is comprised of a mix of inorganic particles/powder and polymer as per instant claim 1 recites. See [0019-0020]. The inorganic particles are of metal (aluminum borate or chromium-titanium-antimony for instance at [0017-0019]). Claims 1-2, 5-6 are met. The ink may further include an organic binder such as a wax or polymer for thermal transfer printing and contain a color such as an inorganic pigment like a black metal oxide pigment (equivalent to a thermal transfer ink information instant claim 7). See [0043] and [0052]. The sheet is a burned sheet, which is equivalent to a baking printed sheet (see 0035). The inorganic particles are smaller than 50 microns (instant claims 3 and 9) (refer to [0016]). The adhesive is between 1 and 500 microns at [0040], which is the exact claimed range of instant claim 14. All claims are met.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0988992 A1 to Kume et al. (EP) in view of USPN 5,578,365 to Kume et al. (US).

EP essentially teaches the claimed invention except for the ratio as recited per instant claims 4 and 10. US teaches a similar printing sheet comprising in the following order: ink

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information (2)/printing sheet (1) comprised of shape retention layer (11) (ink receiving layer) and reinforcing substrate (12) / pressure-sensitive adhesive layer (3) (PSA) and adherend (4). See col. 2, lines 55-68, Figures 1 and 2. Regarding claims 4 and 10 to the ratio, US teaches at col. 4, lines 40-45 that the amounts of silicone resin to inorganic powder is generally from 20 to 300 parts by weight per 100 parts by weight of the powder. Such teaching is overlapping the claimed range of 1 to 1000 parts by weight of the powder per 100 parts by weight of the silicon resin/binder (e.g. 100 parts of resin = 100 parts of resin claimed, 100 parts of powder = 100 parts of powder claimed yielding a 1:1 ratio). Thus it would have been obvious to one having ordinary skill in the art to substitute the teachings of EP in view of the US teaching as the same ingredients and parts are conventionally used (see col. 4, lines 40-45 of US).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

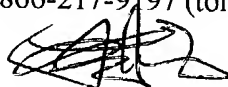
- US 5,780,142 to Kume et al. teaches in this order: ink pattern 2/ink receptive 12/base 11/adhesive 3, where printing sheet 1 is comprised of 12 and 11.
- Derwent 1997-048648 teaches trimethylsiloxy-silicic acid is an ink used to prevent bleeding.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

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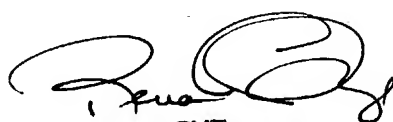
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tamra L. Dicus
Examiner
Art Unit 1774

11/16/04



RENA DYE
SUPERVISORY PATENT EXAMINER 11/17/04
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